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EXAMINER

NGUYEN, JENNIFER T

ART UNIT PAPER NUMBER

2629

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/656,522

Applicant(s)

GERPHEIDE ET AL.

Examiner

Jennifer T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to amendment filed 8/28/06.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8, 9, 11-17, 22, 23, 25-31, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavanaugh et al. (Patent No. US 6,223,233) in view of Donohue et al. (Patent No. US 6,262,717) and further in view of Gerpheide et al. (Patent No. US 5,767,457) and Carroll et al. (Patent No. 6,121,960).

Regarding claims 8, 22 and 36, Kavanaugh teaches a touchpad keyboard (80, figs. 10, 11) for entering data using a finger into a handheld and portable electronic appliance (i.e., personal information device 10), said touchpad keyboard (80) (col. 13, line 32 to col. 14, line 4) comprising:

a hand-held touchpad (80) having a single sensing surface (i.e., touchpad's integrated circuit) including circuitry for detecting and localizing a finger on the single surface thereof and an overlay disposed on the single sensing surface (col. 15, lines 24-32, lines 37-48);

an overlay (i.e., silk-screen) disposed on the sensing surface of the touchpad keyboard that defines a plurality of keys of a standard keyboard (col. 15, lines 24-32);

a communications port (i.e., contact pins 84) for direct coupling to the hand-held portable electronic appliance (10) that enables transmission thereto of signals corresponding to the plurality of keys touched on the touchpad keyboard (80) (col. 13, lines 50-60);

Kavanaugh differs from claims 8, 22 and 36 in that he does not specifically teach a visual feedback that corresponds to signals that will be generated therefrom when the plurality of keys of the touchpad keyboard are touched.

Donohue teaches visual feedback that corresponds to signals that will be generated therefrom when the plurality of keys of the touchpad keyboard are touched (col. 10, lines 1-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the visual feedback as taught by Donohue in the system of Kavanaugh in order to indicate to the user for the times when occasional glances are made at the touch surface.

The combination of Kavanaugh and Donohue teaches an audio feedback system that cause a sound to be made audible whenever any key of the plurality of keys is touch on the touchpad (col. 10, lines 1-9 of Donohue). The combination of Kavanaugh and Donohue differs from claims 8, 22, and 36 in that it does not specifically teach the sound is pre-recorded sound.

Gerpheide teaches audible feedback system that causes a pre-recorded sound (col. 5, lines 20-29). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the audio feedback system that causes a pre-recorded sound as taught by Gerpheide in the system of the combination of Kavanaugh and Donohue in order to provide user a more convenient operation for user.

The combination of Kavanaugh, Donohue, and Gerpheide differs from claims 8, 22, and 36 in that it does not specifically teach a mode switch that enables the touchpad keyboard to switch between functioning as a touchpad keyboard and as a cursor control device.

Carroll teaches a mode switch that enables the touchpad keyboard to switch between functioning as a touchpad keyboard and as a cursor control device (col. 9, lines 29-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the mode switch as taught by Carroll in the system of the combination of Kavanaugh, Donohue, and Gerpheide in order to provide significant display-miniaturization advantage.

Regarding claims 9 and 23, the combination of Kavanaugh, Donohue, Gerpheide, and Carroll, teaches the pre-recorded sound of the audio feedback system includes a pre-recorded voice that states a name of an associated key of the plurality of keys that has been touched (col. 5, lines 20-29, col. 8, line 57 to col. 9, line 10 of Gerpheide).

Regarding claims 11 and 25, the combination of Kavanaugh, Donohue, Gerpheide, and Carroll teaches an scrolling zone (61, fig. 7 of Donohue) disposed in the housing (21), such that a user slides a pointing object along the touchpad scrolling zone to thereby cause data on a display screen to scroll up or down, corresponding to a direction of movement of the pointing object (col. 11, lines 26-36 of Donohue).

Regarding claims 12 and 26, Kavanaugh teaches a communications cable that is coupled to the communications port to thereby enable remote coupling to a portable electronic appliance (col. 14, lines 34-37).

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Regarding claims 13 and 27, Kavanaugh further teaches the hand-held and portable electronic appliance is PDA (col. 13, line 32 to col. 14, line 4).

Regarding claims 14 and 28, Kavanaugh further teaches the communications port is wire (col. 14, lines 34-37).

Regarding claims 15 and 29, the combination of Kavanaugh, Donohue, Gerpheide, and Carroll teaches touchpad keyboard in includes an overlay further comprises tactile feedback (col. 3, lines 49-54 of Donohue).

Regarding claims 16 and 30, the combination of Kavanaugh, Donohue, Gerpheide, and Carroll teaches a plurality of raised ridges, wherein the plurality of raised ridges (70) define a plurality of zones, wherein the plurality of zones corresponds to the plurality of keys of the touchpad keyboard (col. 8, lines 12-27 of Donohue).

Regarding claims 17 and 31, Kavanaugh teaches the touchpad (110) is capacitance-sensitive (col. 15, lines 31-32).

4. Claims 10 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavanaugh et al. (Patent No. US 6,223,233) in view of Donohue et al. (Patent No. US 6,262,717), Gerpheide et al. (Patent No. US 5,767,457), Carroll et al. (Patent No. 6,121,960). and further in view of Kikinis et al. (Patent No. US 5,835,732).

Regarding claims 10 and 24, the combination of Kavanaugh, Donohue, Gerpheide, and Carroll differs from claims 10 and 24 in that it does not specifically teach a mechanical scrolling wheel disposed in a side of touchpad, such that a user can rotate the mechanical wheel to thereby cause data on a display screen to scroll up or down.

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However, referring to Fig. 4, Kikinis teaches a mechanical scrolling wheel (18) disposed in a side of touchpad keyboard (74), such that a user can rotate the mechanical wheel to thereby cause data on a display screen to scroll up or down in order to provide a touchpad of requiring minimal amount of force to be activated (col. 7, lines 39-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the scroll wheel as taught by Kikinis in the system of the combination of Kavanaugh, Donohue, Gerpheide, and Carroll in order to allow interacting with the device rapidly and conveniently.

5. Claims 21 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavanaugh et al. (Patent No. US 6,223,233) in view of Donohue et al. (Patent No. US 6,262,717), Gerpheide et al. (Patent No. US 5,767,457), Carroll et al. (Patent No. 6,121,960). and further in view of More et al. (Patent No. US 5,194,852).

Regarding claims 21 and 35, the combination of Kavanaugh, Donohue, Gerpheide, and Carroll differs from claims 21 and 35 in that it does not specifically teach a second touchpad that is dedicated to function of selection of subject on a display.

More teaches a second touchpad (area 41-60, fig. 1) that is dedicated to function of selection of subject on a display (1) (col. 12, lines 29-45, col. 13, lines 27-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the second touchpad as taught by More in the system of the combination of Kavanaugh, Donohue, Gerpheide, and Carroll in order to allow user operates more functions with a portability device (col. 10, lines 20-28).

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6. Claims 18, 19, 32, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavanaugh et al. (Patent No. US 6,223,233) in view of Donohue et al. (Patent No. US 6,262,717), Gerpheide et al. (Patent No. US 5,767,457), Carroll et al. (Patent No. 6,121,960). and further in view of Grant et al. (U.S. Patent No. 6,618,039).

Regarding claims 18 and 32, the combination of Kavanaugh, Donohue, Gerpheide, and Carroll differs from claims 18 and 32 in that it does not specifically teach a first dedicated key that facilitates navigation in web pages.

However, referring to Fig. 5, Grant teaches a first dedicated key that facilitates navigation in web pages (col. 5, lines 26-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the first dedicated key that facilitates navigation in web pages as taught by Grant in the system of the combination of Kavanaugh, Donohue, Gerpheide, and Carroll in order to allow quickly and conveniently access to the web pages.

Regarding claims 19 and 33, the combination of Kavanaugh, Donohue, Gerpheide, Carroll, and Grant teaches at least a second dedicated key that is programmable to actuate a computer program (col. 5, lines 26-67 of Grant).

7. Claims 20 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavanaugh et al. (Patent No. US 6,223,233) in view of Donohue et al. (Patent No. US 6,262,717), Gerpheide et al. (Patent No. US 5,767,457), Carroll et al. (Patent No. 6,121,960). and further in view of Ure (U.S. Patent No. 6,107,997).

Regarding claims 20 and 34, the combination of Kavanaugh, Donohue, Gerpheide, and Carroll differs from claims 20 and 34 in that it does not specifically teach a mode switch that

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enables the touchpad keyboard to switch between functioning as a touchpad keyboard and as a cursor control device.

However, referring to Fig. 9, Ure teaches a mode switch that enables the touchpad keyboard to switch between functioning as a touchpad keyboard and as a cursor control device (col. 2, lines 8-19, col. 7, lines 49-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the mode switch that enables the touchpad keyboard to switch between functioning as a touchpad keyboard and as a cursor control device as taught by Ure in the system of the combination of Kavanaugh, Donohue, Gerpheide, and Carroll in order to allow input text and control the cursor quickly and easily.

8. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kavanaugh et al. (Patent No. US 6,223,233) in view of Donohue et al. (Patent No. US 6,262,717), Gerpheide et al. (Patent No. US 5,767,457), Grant et al. (U.S. Patent No. 6,618,039) and further in view of Kono (Patent No. US 5,914,707).

Regarding claim 37, the combination of Kavanaugh, Donohue, Gerpheide and Grant teaches all the limitation except a microphone for recording audio data for transmission via the network, and for live transmission of audio data for transmission via the network.

Kono teaches a microphone (7) for recording audio data for transmission via the network, and for live transmission of audio data for transmission via the network (col. 6, lines 19-40 of Kono). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the transmission of audio data via the network as taught by Kono in the system of the combination of Kavanaugh, Donohue, Gerpheide and Grant in order to provide a convenient communication in the touchpad system.

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9. Applicant's arguments with respect to claims 8-37 have been considered but are moot in view of the new ground(s) of rejection.

Response to Arguments

10. Applicants' arguments stated 8/28/2006, have been fully considered but they are not persuasive because as follows:

In response to applicants' argument filed "Gerpheide do not state what the pre-recorded voice is saying". Examiner respectfully teaches Gerpheide teaches the pre-recorded voice is saying (col. 5, lines 20-29, col. 8, line 57 to col. 9, line 10). Applicants' argument filed "for recording audio data for...via the network". the combination of Kavanaugh, Donohue, Gerpheide, Grant, and Kono teaches recording audio data for transmission via the network, and for live transmission of audio data for transmission via the network (col. 9, lines 29-34 of Grant, col. 6, lines 19-40 of Kono). The ground of the rejection is therefore maintained.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer T. Nguyen whose telephone number is 571-272-7696. The examiner can normally be reached on Mon-Fri: 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer Nguyen
9/25/05



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